



AMENDMENTS TO THE CLAIMS

Claims 1-15 (Canceled)

Claim 16 (New) A data processing system, comprising:

a first data processing unit operable to perform data processing according to a program control;

a plurality of second data processing units, each of said second data processing units being operable to perform data processing under wired logic control, and each of said plurality of second data processing units comprising:

a calculating unit; and

a selector unit;

a storage unit operable to store data;

a first data transfer unit operable to connect said first data processing unit with each of said plurality of second data processing units, via said storage unit; and

a second data transfer unit operable to connect each of said plurality of second data processing units with each other, wherein

said second data transfer unit is operable to connect at least one of said plurality of second data processing units in series to another second data processing unit, and

said selector unit is operable to determine a destination of a data transfer from among each of said plurality of second data processing units according to a link map table.

Claim 17 (New) The data processing system according to Claim 16, wherein said first data processing unit is operable to control the data transfer via said second data transfer unit.

Claim 18 (New) The data processing system according to claim 16, further comprising a first data transfer control unit operable to control the data transfer via said second data transfer unit.

Claim 19 (New) The data processing system according to Claim 16, wherein said second data processing unit is operable to perform an encoding process.

Claim 20 (New) The data processing system according to Claim 16, wherein said second data processing unit is operable to perform a decoding process.